10/743,809; cl's 3 search EAST Search History, 4/24/06 RSA

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	224	568/18.ccls.	US-PGPUB; USPAT	OR	ON	2006/04/24 14:06
L2	5183	430/270.1.ccls.	US-PGPUB; USPAT	OR	ON	2006/04/24 14:03
L3	447	568/28.ccls.	US-PGPUB; USPAT	OR	ON	2006/04/24 14:06
L4	4396	triarylsulfonium or triphenylsulfonium	US-PGPUB; USPAT	OR	ON	2006/04/24 14:06
L5	19	1 and 4	US-PGPUB; USPAT	OR	ON	2006/04/24 14:07
L6	15	3 and 4	US-PGPUB; USPAT	OR	ON	2006/04/24 14:13

10/743,809, CAReg.file, 4/24/06, RA
STRUC.search

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     FILE 'REGISTRY' ENTERED AT 12:30:34 ON 24 APR 2006
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L4                STRUCTURE UPLOADED
L5                STRUCTURE UPLOADED
L6                STRUCTURE UPLOADED
L7              2 S L1 FULL
L8              0 S L2 FULL
L9              2 S L3 FULL
L10            33 S L4 FULL
L11             0 S L5 FULL
L12             0 S L6 FULL

     FILE 'CAPLUS' ENTERED AT 12:34:34 ON 24 APR 2006
L13             1 S L7

     FILE 'REGISTRY' ENTERED AT 12:36:17 ON 24 APR 2006

     FILE 'CAPLUS' ENTERED AT 12:36:48 ON 24 APR 2006
L14             1 S L9

     FILE 'REGISTRY' ENTERED AT 12:37:29 ON 24 APR 2006

     FILE 'CAPLUS' ENTERED AT 12:38:01 ON 24 APR 2006
L15            10 S L10
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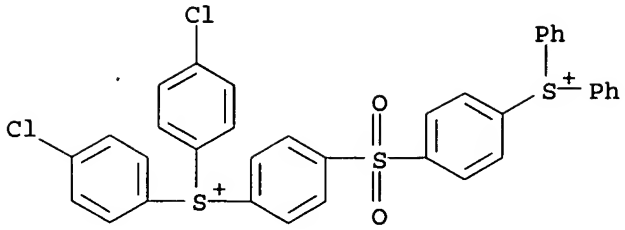
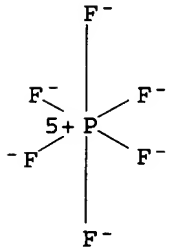


CM 2

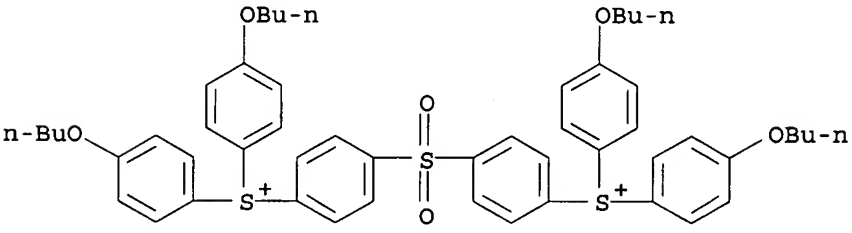
CRN 16919-18-9
CMF F6 P
CCI CCS



RN 176310-58-0 CAPLUS
CN Sulfonium, (sulfonyldi-4,1-phenylene)bis[bis(4-butoxyphenyl)-, bis[(OC-6-11)-hexafluoroantimonate(1-)] (9CI) (CA INDEX NAME)

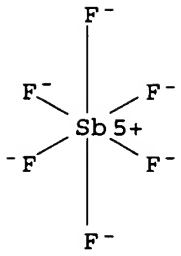
CM 1

CRN 176310-57-9
CMF C52 H60 O6 S3



CM 2

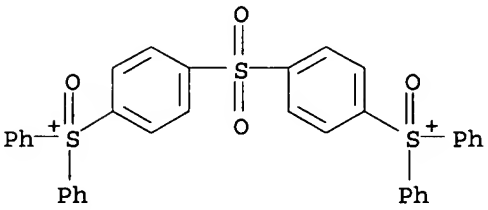
CRN 17111-95-4
CMF F6 Sb
CCI CCS



RN 176310-62-6 CAPLUS
CN Sulfoxonium, (sulfonyldi-4,1-phenylene)bis[diphenyl-, bis[hexafluorophosphate(1-)] (9CI) (CA INDEX NAME)

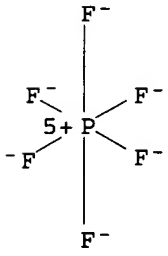
CM 1

CRN 176310-61-5
CMF C36 H28 O4 S3



CM 2

CRN 16919-18-9
CMF F6 P
CCI CCS

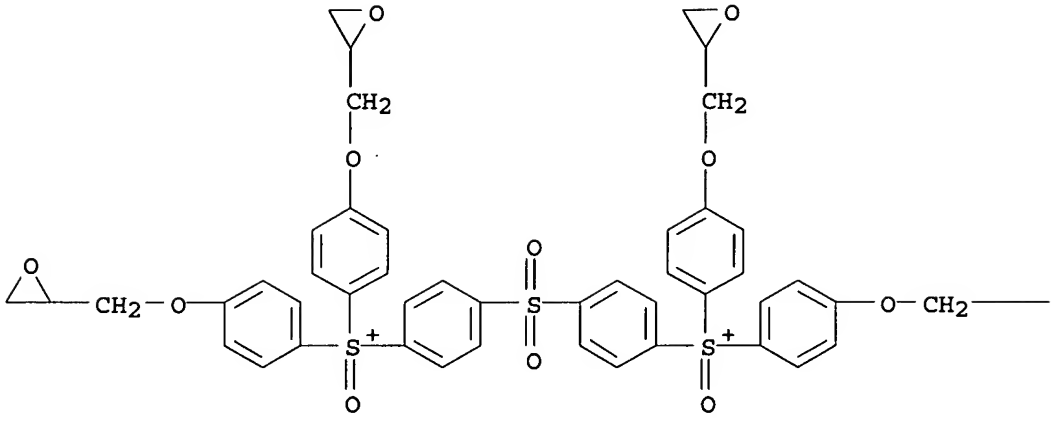


RN 176310-64-8 CAPLUS
CN Sulfoxonium, (sulfonyldi-4,1-phenylene)bis[bis[4-(oxiranylmethoxy)phenyl]-, bis[(OC-6-11)-hexafluoroantimonate(1-)] (9CI) (CA INDEX NAME)

CM 1

CRN 176310-63-7
CMF C48 H44 O12 S3

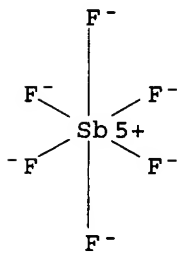
PAGE 1-A



PAGE 1-B

CM 2

CRN 17111-95-4
CMF F6 Sb
CCI CCS

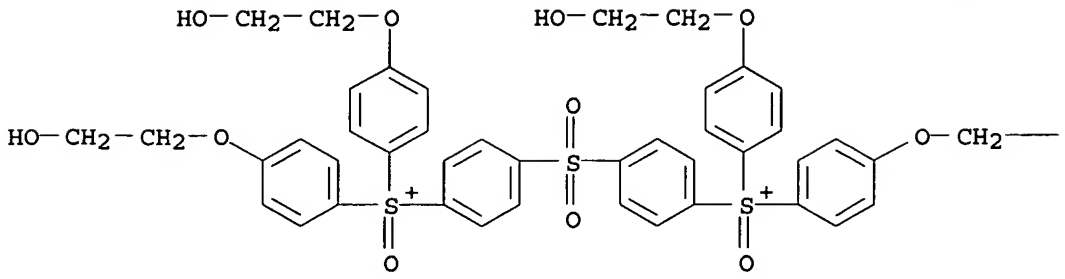


RN 176310-66-0 CAPLUS
CN Sulfoxonium, (sulfonyldi-4,1-phenylene)bis[bis[4-(2-hydroxyethoxy)phenyl]-, bis[(OC-6-11)-hexafluoroantimonate(1-)] (9CI) (CA INDEX NAME)

CM 1

CRN 176310-65-9
CMF C44 H44 O12 S3

PAGE 1-A

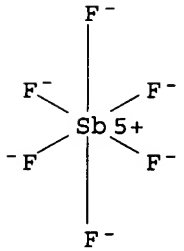


PAGE 1-B

— CH_2 — OH

CM 2

CRN 17111-95-4
CMF F6 Sb
CCI CCS



IT **176310-52-4P 176310-60-4P**
RL: CAT (Catalyst use); IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of photopolymn. initiators and radiation-curable compns.)
RN 176310-52-4 CAPLUS
CN Sulfonium, (sulfonyldi-4,1-phenylene)bis[bis(4-fluorophenyl)-, bis[(OC-6-11)-hexafluoroantimonate(1-)] (9CI) (CA INDEX NAME)

CM 1

CRN 176310-51-3
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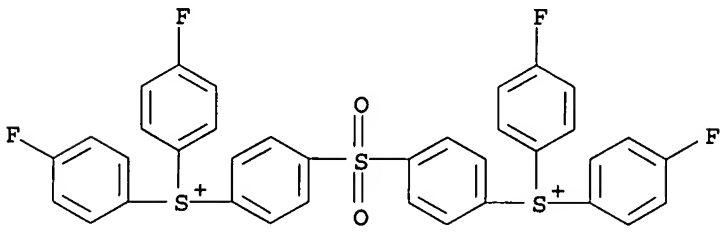
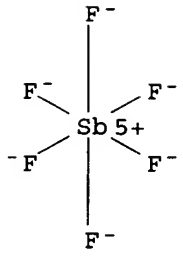


CM 2

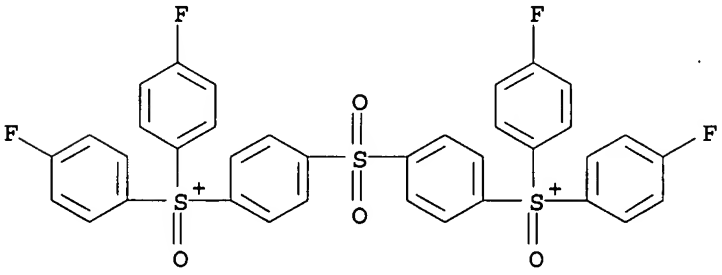
CRN 17111-95-4
CMF F6 Sb
CCI CCS



RN 176310-60-4 CAPLUS
CN Sulfoxonium, (sulfonyldi-4,1-phenylene)bis[bis(4-fluorophenyl)-, bis[(OC-6-11)-hexafluoroantimonate(1-)] (9CI) (CA INDEX NAME)

CM 1

CRN 176310-59-1
CMF C36 H24 F4 O4 S3



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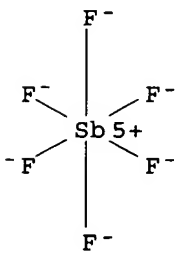
CRN 17111-95-4
CMF F6 Sb
CCI CCS



L15 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1996:256143 CAPLUS
DN 124:292462

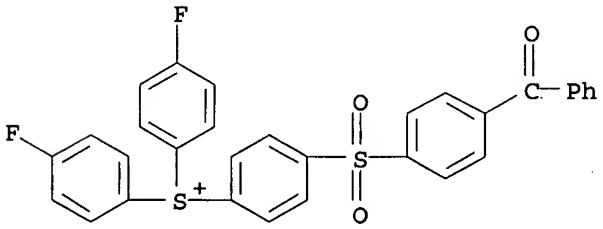
TI Cationic photoinitiators and photocurable compositions and cured products
IN Abe, Tetsuya; Yokoshima, Minoru
PA Nippon Kayaku Kk, Japan
SO Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08027209	A2	19960130	JP 1994-189079	19940720
	JP 3424771	B2	20030707		
PRAI	JP 1994-189079		19940720		

OS MARPAT 124:292462
AB The compns. useful for ink and coating applications, and giving odorless cured products with good gloss, comprise cationically polymerizable compds., and specific sulfonium compds. or sulfoxonium compds. as photoinitiators. Thus, a composition containing PhCO-p-C6H4SO2-p-C6H4S+(C6H4-p-F)2·PF6- 1.5, Celloxide 2021 (alicyclic epoxy resin) 2021 80, and EHPE 3150 (alicyclic epoxy resin) 20 parts was applied on an Al test panel, and irradiated by UV to give coatings with good gloss.
IT **175840-84-3P 175840-92-3P 175840-94-5P**
RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(sulfonium and sulfoxonium compds. as cationic photoinitiators and photocurable compns. and cured products)
RN 175840-84-3 CAPLUS
CN Sulfonium, [4-[(4-benzoylphenyl)sulfonyl]phenyl]bis(4-fluorophenyl)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

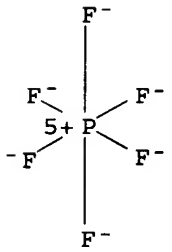
CM 1

CRN 175840-83-2
CMF C31 H21 F2 O3 S2



CM 2

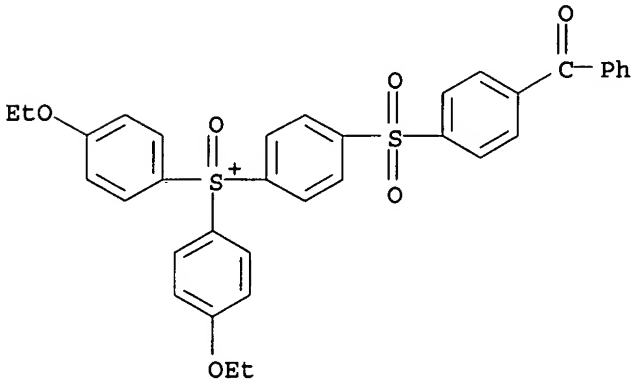
CRN 16919-18-9
CMF F6 P
CCI CCS



RN 175840-92-3 CAPLUS
CN Sulfoxonium, [4-[(4-benzoylphenyl)sulfonyl]phenyl]bis(4-ethoxyphenyl)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

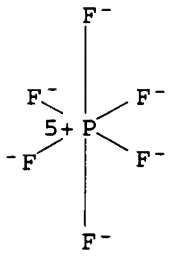
CM 1

CRN 175840-91-2
CMF C35 H31 O6 S2



CM 2

CRN 16919-18-9
CMF F6 P
CCI CCS

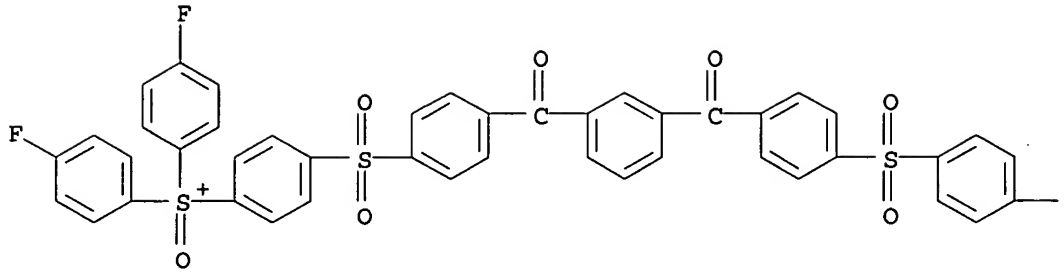


RN 175840-94-5 CAPLUS
CN Sulfoxonium, [1,3-phenylenebis(carbonyl-4,1-phenylenesulfonyl-4,1-phenylene)]bis[bis(4-fluorophenyl)-, bis[(OC-6-11)-hexafluoroantimonate(1-)] (9CI) (CA INDEX NAME)

CM 1

CRN 175840-93-4
CMF C56 H36 F4 O8 S4

PAGE 1-A



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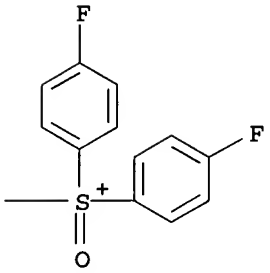
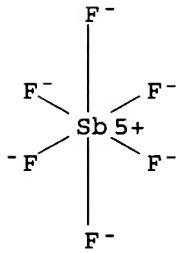


CM 2

CRN 17111-95-4
CMF F6 Sb
CCI CCS



L15 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1992:131247 CAPLUS
DN 116:131247
TI Preparation of triarylsulfoxonium salts and their use as initators for cationic photopolymerization
IN Irving, Edward; Taylor, David Alan; Lunn, Robert James; Innocenzi, John Paul; Haines, Alan Hugh
PA CIBA Ltd., Switz.
SO Brit. UK Pat. Appl., 24 pp.
CODEN: BAXXDU
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 2238787	A1	19910612	GB 1989-27530	19891206
	GB 2238787	B2	19930303		

	JP 03271270	A2	19911203	JP 1990-333442	19901129
	DE 4038536	A1	19910613	DE 1990-4038536	19901203
	CA 2031428	AA	19910607	CA 1990-2031428	19901204
	FR 2655338	A1	19910607	FR 1990-15147	19901204
	FR 2655338	B1	19921002		
	US 5576461	A	19961119	US 1990-622905	19901206

PRAI GB 1989-27530 A 19891206

OS MARPAT 116:131247

AB R1R2R3S+O X- [I; R1, R2, R3 = (substituted) C6-10 aryl, X = anion], useful as initiators for cationic polymerization of compds. such as diepoxides in the manufacture of coatings, are prepared by oxidation of the corresponding sulfonium salts using a peracid under basic conditions in a nonketone solvent. Use of the basic conditions and nonketone solvent improves the yield and eliminates contamination of the product with the starting material. Thus, a solution of 5.1 g NaOH and 6.7 g 30% aqueous H2O2 solution in 50 mL water was added dropwise to 300 mL MeOH containing 5.6 g (4-MeOC6H4)Ph2SPF6 and 6.1 g p-toluenesulfonyl chloride at 15° with stirring, and the mixture was allowed to warm to room temperature overnight to give 84% yield I (R1 = 4-MeOC6H4, R2 = R3 = Ph, X = PF6) (II). Irradiation of a mixture containing 100 parts bisphenol A diglycidyl ether and 3 parts II on tin plate with a 5000-W metal halide lamp 75 cm from the plate provided a tack-free coating in 2 mins.

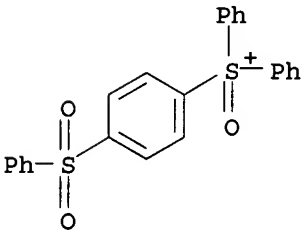
IT **139572-77-3P**
RL: PREP (Preparation)
(manufacture of, for cationic photopolymn. catalysts)

RN 139572-77-3 CAPLUS

CN Sulfoxonium, diphenyl[4-(phenylsulfonyl)phenyl]-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

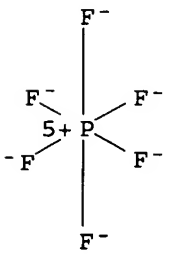
CM 1

CRN 139572-76-2
CMF C24 H19 O3 S2



CM 2

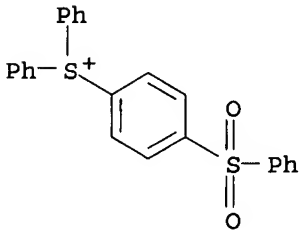
CRN 16919-18-9
CMF F6 P
CCI CCS



L15 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1985:167245 CAPLUS
DN 102:167245
TI Recent advances in thermally and photochemically initiated cationic polymerization
AU Crivello, James V.; Lee, J. L.
CS Gen. Electr. Corp. Res. and Dev., Schenectady, NY, 12301, USA
SO Polymer Journal (Tokyo, Japan) (1985), 17(1), 73-83
CODEN: POLJB8; ISSN: 0032-3896
DT Journal
LA English
AB Classes of arylsulfonium salts are discussed which have enhanced efficiency as photoinitiators or thermal initiators of cationic polymerization One of these compds., p-PhSC6H4SPh2+AsF6- [75482-17-6], was identified as a component of the Friedel-Crafts reaction of C6H6 with S2Cl2. Similar compds., of formula ArSPh2+AsF6- (e.g., Ar = p-PhOC6H4, m-PhSC6H4, and p-PhSO2C6H4) and cyclic analogs (e.g., S-phenyldibenzothiophenium hexafluoroarsenate [82617-08-1]), were also prepared and characterized. Other classes (e.g., dialkylphenacylsulfonium salts, ArCOCH2SR2+X-) are also described; one class, characterized by 4-hydroxy-3,5-dimethoxyphenyldimethylsulfonium hexafluorophosphate [95896-72-3], is especially suited as thermal initiators. The activities of the initiators were tested in the cationic polymns. of limonene dioxide, cyclohexene oxide, and styrene oxide.
IT **75482-29-0**
RL: USES (Uses)
(photoinitiators, for cationic polymerization of epoxides)
RN 75482-29-0 CAPLUS
CN Sulfonium, diphenyl[4-(phenylsulfonyl)phenyl]-, hexafluoroarsenate(1-) (9CI) (CA INDEX NAME)

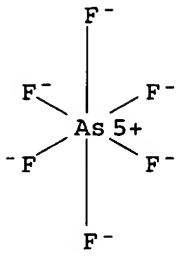
CM 1

CRN 47572-95-2
CMF C24 H19 O2 S2



CM 2

CRN 16973-45-8
CMF As F6
CCI CCS



L15 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1983:180499 CAPLUS
DN 98:180499
TI Triarylsulfonium salts
IN Crivello, James V.; Lee, Julia L.
PA General Electric Co., USA
SO U.S., 8 pp. Cont.-in-part of U.S. Ser. No. 79,692, abandoned.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 2

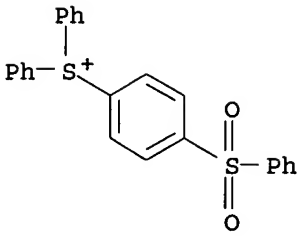
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4374066	A	19830215	US 1980-200769	19801027
	ZA 8005273	A	19811125	ZA 1980-5273	19800826
	GB 2061280	A	19810513	GB 1980-29024	19800909
	GB 2061280	B2	19840516		
	CA 1120181	A1	19820316	CA 1980-361443	19800925
	FR 2466457	A1	19810410	FR 1980-20689	19800926
	FR 2466457	B1	19850308		
	JP 56055420	A2	19810516	JP 1980-133103	19800926
	JP 63036332	B4	19880720		
	ES 495420	A1	19811016	ES 1980-495420	19800926
	AU 8062780	A1	19810409	AU 1980-62780	19800929
	AU 539699	B2	19841011		
	BR 8006335	A	19810414	BR 1980-6335	19800929
PRAI	US 1979-79692	A2	19790928		

OS MARPAT 98:180499
AB Triarylsulfonium salts such as I [75482-17-6] are prepared by a method based on the reaction of an aromatic hydrocarbon S2Cl2, and Cl in the presence of a Friedel-Crafts catalyst. The triarylsulfonium salts are used as cationic photoinitiaters to effect the deep-section cure of organic resin compns. Thus, a mixture of Ph2S [139-66-2] 37.2, AlCl3 13.34, and Cl 9.5 parts was stirred and poured onto 500 parts ice. The semisolid was washed with H2O. Then 27.8 parts AsF6- K+ and 500 parts H2O were added to the residue and the mixture stirred at 30° for 1 h. The product was washed with H2O then with anhydrous Et2O and dried at 60° for 16 h. The product was then recrystd. from 95% EtOH to give 31% yield of I having m.p. 77-87°. Films from a 3% solution of I in 3,4-epoxycyclohexylmethyl 3',4'-epoxycyclohexane carboxylate [2386-87-0] were radiation-cured in 1 min to a maximum thickness of 50 mils, compared with 15 mils for a similar film containing Ph3S+ AsF6-.
IT **75482-29-0P**
RL: PREP (Preparation)
(preparation of, as photoinitiators for deep cure of polymers)
RN 75482-29-0 CAPLUS
CN Sulfonium, diphenyl[4-(phenylsulfonyl)phenyl]-, hexafluoroarsenate(1-) (9CI) (CA INDEX NAME)

CM 1

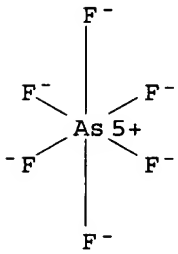
CRN 47572-95-2

CMF C24 H19 O2 S2



CM 2

CRN 16973-45-8
CMF As F6
CCI CCS



L15 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1981:516453 CAPLUS
DN 95:116453
TI Deep-setting photohardenable compositions
IN Crivello, James Vincent; Lam, Julia Hingwai
PA General Electric Co., USA
SO Ger. Offen., 23 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3035807	A1	19810409	DE 1980-3035807	19800923
	DE 3035807	C2	19930401		
	ZA 8005273	A	19811125	ZA 1980-5273	19800826
	GB 2061280	A	19810513	GB 1980-29024	19800909
	GB 2061280	B2	19840516		
	CA 1120181	A1	19820316	CA 1980-361443	19800925
	FR 2466457	A1	19810410	FR 1980-20689	19800926
	FR 2466457	B1	19850308		
	JP 56055420	A2	19810516	JP 1980-133103	19800926
	JP 63036332	B4	19880720		
	ES 495420	A1	19811016	ES 1980-495420	19800926
	AU 8062780	A1	19810409	AU 1980-62780	19800929
	AU 539699	B2	19841011		
	BR 8006335	A	19810414	BR 1980-6335	19800929
PRAI	US 1979-79692	A	19790928		

AB The sulfonium compds. 4-RC6H4S+Ph2 AsF6- (R = PhS, PhSO, or PhSO2) and 4-(PhS)C6H4S+Ph2 PF6- [75482-18-7] are useful as initiators for the polymerization of photohardenable epoxy, phenolic, vinyl, and other compds.

Thus, Ph2S [139-66-2] was treated with Cl in the presence of AlCl3, and the reaction product was treated with KAsF6 [17029-22-0] to prepare 4-(PhS)C6H4S+Ph2 AsF6- (I) [75482-17-6]. A 3% solution containing 3,4-epoxycyclohexylmethyl 3,4-epoxycyclohexanecarboxylate (II) and I was hardened by UV light as a 1270-μ layer. With Ph3S+ AsF6- as the initiator instead of I, the maximum thickness of II for satisfactory hardening was 254-381 μ.

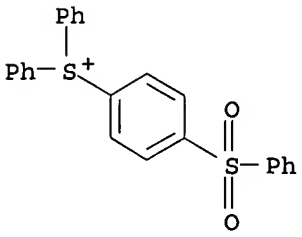
IT **75482-29-0**
RL: CAT (Catalyst use); USES (Uses)
(catalysts, for photopolymn. and photocrosslinking)

RN 75482-29-0 CAPLUS

CN Sulfonium, diphenyl[4-(phenylsulfonyl)phenyl]-, hexafluoroarsenate(1-) (9CI) (CA INDEX NAME)

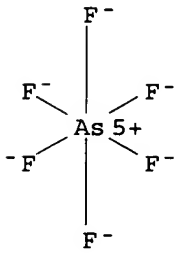
CM 1

CRN 47572-95-2
CMF C24 H19 O2 S2



CM 2

CRN 16973-45-8
CMF As F6
CCI CCS



L15 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1980:605102 CAPLUS

DN 93:205102

TI Complex triarylsulfonium salt photoinitiators. II. The preparation of several new complex triarylsulfonium salts and the influence of their structure in photoinitiated cationic polymerization

AU Crivello, J. V.; Lam, J. H. W.

CS Gen. Electr. Corp. Res. Dev. Cent., Schenectady, NY, 12301, USA

SO Journal of Polymer Science, Polymer Chemistry Edition (1980), 18(8), 2697-714
CODEN: JPLCAT; ISSN: 0449-296X

DT Journal

LA English

AB Complex triarylsulfonium salts containing thiophenoxy chromophores were prepared

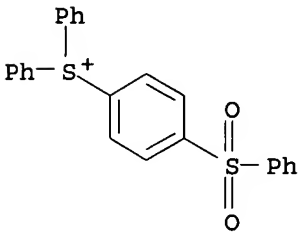
The effects of the position of the thiophenoxy group on the rate of photolysis and on the photoinitiated cationic polymerization of various monomers were investigated. Salts in which the thiophenoxy group was oxidized to the sulfoxide and the sulfone also were prepared to examine the effects of the oxidation state of the S-bearing chromophore on the efficiencies in photoinitiated cationic polymerization All complex salts having extended conjugation not impeded by positional isomerization or blocked by oxidation of the thiophenoxy group are more reactive than the corresponding triphenylsulfonium salts in cationic polymerization

IT **75482-29-0**
RL: CAT (Catalyst use); USES (Uses)
(catalysts, for cationic photochem. polymerization)

RN 75482-29-0 CAPLUS
CN Sulfonium, diphenyl[4-(phenylsulfonyl)phenyl]-, hexafluoroarsenate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 47572-95-2
CMF C24 H19 O2 S2



CM 2

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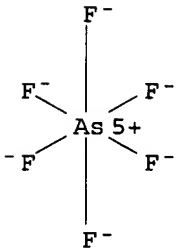
CMF As F6
CCI CCS



L15 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1972:85504 CAPLUS
DN 76:85504
TI Electrochemistry of organic sulfur compounds. III. Novel anodic synthesis of a sulfonium salt from diphenyl sulfide
AU Uneyama, Kenji; Torii, Sigeru
CS Sch. Eng., Okayama Univ., Okayama, Japan
SO Journal of Organic Chemistry (1972), 37(3), 367-9
CODEN: JOCEAH; ISSN: 0022-3263
DT Journal
LA English

AB Ph2S, dissolved in MeCN containing LiClO4, was electrolyzed at 30° to give diphenyl [p-(phenylthio)phenyl] sulfonium (I), Ph2SO, and 1,4-bis(phenylthio)benzene. Sulfonium salt I predominated in the absence of water, while Ph2SO increased as the concentration of H2O was raised.

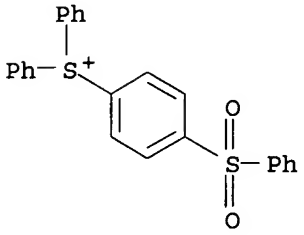
IT **32958-91-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 32958-91-1 CAPLUS

CN Sulfonium, diphenyl[4-(phenylsulfonyl)phenyl]-, perchlorate (9CI) (CA INDEX NAME)

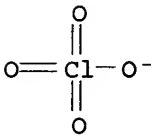
CM 1

CRN 47572-95-2
CMF C24 H19 O2 S2



CM 2

CRN 14797-73-0
CMF Cl O4



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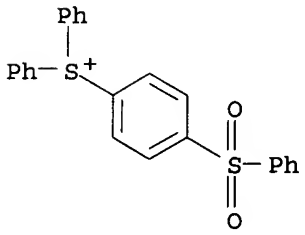
2006 ACS on STN
AN 1980:605102 CAPLUS
DN 93:205102
TI Complex triarylsulfonium salt photoinitiators. II. The preparation of several new complex triarylsulfonium salts and the influence of their structure in photoinitiated cationic polymerization
AU Crivello, J. V.; Lam, J. H. W.
CS Gen. Electr. Corp. Res. Dev. Cent., Schenectady, NY, 12301, USA
SO Journal of Polymer Science, Polymer Chemistry Edition (1980), 18(8), 2697-714
CODEN: JPLCAT; ISSN: 0449-296X
DT Journal
LA English
AB Complex triarylsulfonium salts containing thiophenoxy chromophores were prepared
The effects of the position of the thiophenoxy group on the rate of photolysis and on the photoinitiated cationic polymerization of various monomers
were investigated. Salts in which the thiophenoxy group was oxidized to the sulfoxide and the sulfone also were prepared to examine the effects of the oxidation state of the S-bearing chromophore on the efficiencies in photoinitiated cationic polymerization All complex salts having extended conjugation not impeded by positional isomerization or blocked by oxidation of the thiophenoxy group are more reactive than the corresponding triphenylsulfonium salts in cationic polymerization
IT **75482-29-0**
RL: CAT (Catalyst use); USES (Uses)
(catalysts, for cationic photochem. polymerization)
RN 75482-29-0 CAPLUS
CN Sulfonium, diphenyl[4-(phenylsulfonyl)phenyl]-, hexafluoroarsenate(1-) (9CI) (CA INDEX NAME)

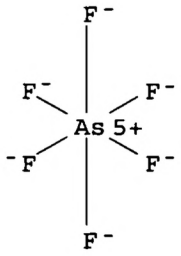
CM 1

CRN 47572-95-2
CMF C24 H19 O2 S2



CM 2

CRN 16973-45-8
CMF As F6
CCI CCS


F-
F-
F-
As 5+
-F
F-
F-

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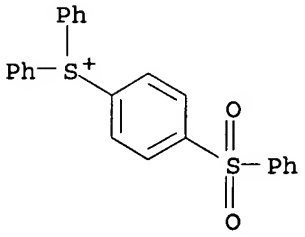
L15 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1972:85504 CAPLUS
DN 76:85504
TI Electrochemistry of organic sulfur compounds. III. Novel anodic synthesis of a sulfonium salt from diphenyl sulfide
AU Uneyama, Kenji; Torii, Sigeru
CS Sch. Eng., Okayama Univ., Okayama, Japan
SO Journal of Organic Chemistry (1972), 37(3), 367-9
CODEN: JOCEAH; ISSN: 0022-3263
DT Journal
LA English
AB Ph2S, dissolved in MeCN containing LiClO4, was electrolyzed at 30° to give diphenyl [p-(phenylthio)phenyl] sulfonium (I), Ph2SO, and 1,4-bis(phenylthio)benzene. Sulfonium salt I predominated in the absence of water, while Ph2SO increased as the concentration of H2O was raised.
IT **32958-91-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 32958-91-1 CAPLUS
CN Sulfonium, diphenyl[4-(phenylsulfonyl)phenyl]-, perchlorate (9CI) (CA INDEX NAME)

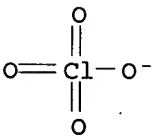
CM 1

CRN 47572-95-2
CMF C24 H19 O2 S2



CM 2

CRN 14797-73-0
CMF Cl O4



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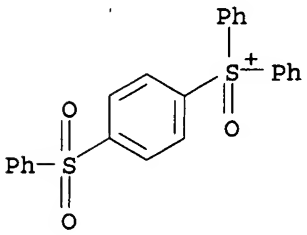
ANSWER 2 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1997:599494 CAPLUS
DN 127:191198
TI Photoinitiators and photoinitiator compositions and photocurable hybrid resin compositions
IN Toba, Yasumasa; Tanaka, Yasuhiro; Yasuike, Madoka
PA Toyo Ink Mfg. Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 31 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09183961	A2	19970715	JP 1995-342494	19951228
PRAI	JP 1995-342494		19951228		

OS MARPAT 127:191198
AB The photoinitiator compns., having a high curing rate, contain sulfoxonium borates R1R2R3S+(O)·(BXmZn)- (R1-R3 = C6-20 aryl which may be substituted by halo, OH, NO2, CN, NH2, alkyl, alkoxy, aralkyloxy, aryl, aryloxy, aralkyl group; X = F, Cl; Z = Ph group substituted by ≥2 F, CN, NO2, CF3; m = 0-3; n = 1-4; m + n = 4). Thus, a composition containing 100 parts an epoxy resin (ERL 4221) and 3 parts triphenylsulfoxonium tetrakis(pentafluorophenyl)borate was irradiated by UV to give a cured film.
IT **194293-67-9 194293-75-9**
RL: CAT (Catalyst use); USES (Uses)
(sulfoxonium borate photoinitiators and photocurable hybrid resin compns.)
RN 194293-67-9 CAPLUS
CN Sulfoxonium, diphenyl[4-(phenylsulfonyl)phenyl]-, tetrakis(pentafluorophenyl)borate(1-) (9CI) (CA INDEX NAME)

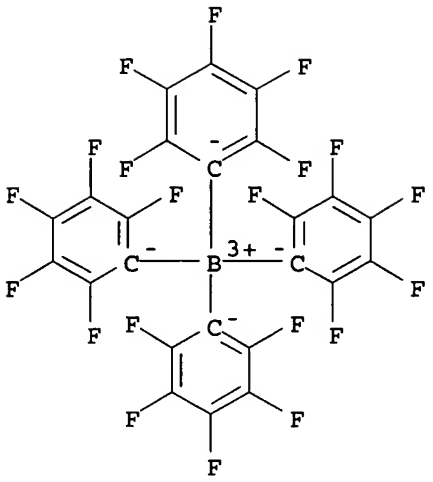
CM 1

CRN 139572-76-2
CMF C24 H19 O3 S2



CM 2

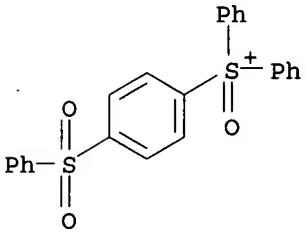
CRN 47855-94-7
CMF C24 B F20
CCI CCS



RN 194293-75-9 CAPLUS
CN Sulfoxonium, diphenyl[4-(phenylsulfonyl)phenyl]-, tetrakis[4-(trifluoromethyl)phenyl]borate(1-) (9CI) (CA INDEX NAME)

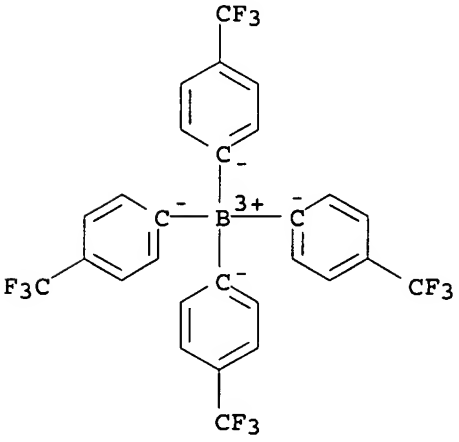
CM 1

CRN 139572-76-2
CMF C24 H19 O3 S2



CM 2

CRN 47823-82-5
CMF C28 H16 B F12
CCI CCS



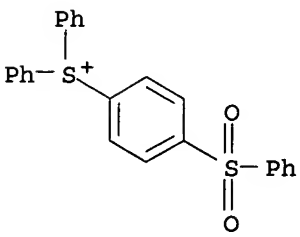
L15 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1983:180499 CAPLUS
DN 98:180499
TI Triarylsulfonium salts
IN Crivello, James V.; Lee, Julia L.
PA General Electric Co., USA
SO U.S., 8 pp. Cont.-in-part of U.S. Ser. No. 79,692, abandoned.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4374066	A	19830215	US 1980-200769	19801027
	ZA 8005273	A	19811125	ZA 1980-5273	19800826
	GB 2061280	A	19810513	GB 1980-29024	19800909
	GB 2061280	B2	19840516		
	CA 1120181	A1	19820316	CA 1980-361443	19800925
	FR 2466457	A1	19810410	FR 1980-20689	19800926
	FR 2466457	B1	19850308		
	JP 56055420	A2	19810516	JP 1980-133103	19800926
	JP 63036332	B4	19880720		
	ES 495420	A1	19811016	ES 1980-495420	19800926
	AU 8062780	A1	19810409	AU 1980-62780	19800929
	AU 539699	B2	19841011		
	BR 8006335	A	19810414	BR 1980-6335	19800929
PRAI	US 1979-79692	A2	19790928		

OS MARPAT 98:180499
AB Triarylsulfonium salts such as I [75482-17-6] are prepared by a method based on the reaction of an aromatic hydrocarbon S2Cl2, and Cl in the presence of a Friedel-Crafts catalyst. The triarylsulfonium salts are used as cationic photoinitiaters to effect the deep-section cure of organic resin compns. Thus, a mixture of Ph2S [139-66-2] 37.2, AlCl3 13.34, and Cl 9.5 parts was stirred and poured onto 500 parts ice. The semisolid was washed with H2O. Then 27.8 parts AsF6- K+ and 500 parts H2O were added to the residue and the mixture stirred at 30° for 1 h. The product was washed with H2O then with anhydrous Et2O and dried at 60° for 16 h. The product was then recrystd. from 95% EtOH to give 31% yield of I having m.p. 77-87°. Films from a 3% solution of I in 3,4-epoxycyclohexylmethyl 3',4'-epoxycyclohexane carboxylate [2386-87-0] were radiation-cured in 1 min to a maximum thickness of 50 mils, compared with 15 mils for a similar film containing Ph3S+ AsF6-.
IT **75482-29-0P**
RL: PREP (Preparation)
(preparation of, as photoinitiators for deep cure of polymers)
RN 75482-29-0 CAPLUS
CN Sulfonium, diphenyl[4-(phenylsulfonyl)phenyl]-, hexafluoroarsenate(1-) (9CI) (CA INDEX NAME)

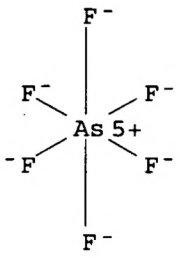
CM 1

CRN 47572-95-2
CMF C24 H19 O2 S2



CM 2

CRN 16973-45-8
CMF As F6
CCI CCS



1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:219970 CAPLUS

DN 142:306448

TI Onium salt compound and radiation-sensitive resin composition

IN Yoneda, Eiji; Wang, Yong; Nishimura, Yukio

PA Japan

SO U.S. Pat. Appl. Publ., 85 pp.
CODEN: USXXCO

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2005053861	A1	20050310	US 2003-743809	20031224
	JP 2004250427	A2	20040909	JP 2003-182089	20030626
	JP 2005104956	A2	20050421	JP 2003-423516	20031219
PRAI	JP 2002-373531	A	20021225		
	JP 2002-373625	A	20021225		
	JP 2003-182089	A	20030626		
	JP 2003-315010	A	20030908		

OS MARPAT 142:306448

AB An onium salt compound having a cation moiety of formula I (A = I, S; m = 1 or 2; n = 0 or 1; x = 1-10; and Ar1, Ar2 = aromatic hydrocarbon group; and P = -O-SO2R, -O-S(O)R, -SO2R; R = H, (substituted) alkyl group, or a (substituted) alicyclic hydrocarbon group)is disclosed. The onium salt compound is suitable as a photoacid generator for photoresists of a pos.-tone radiation-sensitive resin composition The pos.-tone radiation-sensitive resin composition containing this compound is useful as a chemical-amplified photoresist exhibiting high resolution at high sensitivity, responsive to various radiations, and having outstanding storage stability.

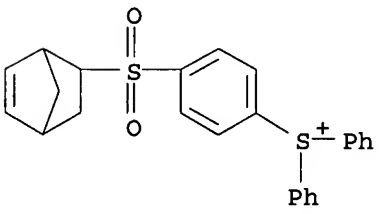
IT **847800-07-1P**
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(onium salt compound as photoacid generator for radiation-sensitive resin composition)

RN 847800-07-1 CAPLUS

CN Sulfonium, [4-(bicyclo[2.2.1]hept-5-en-2-ylsulfonyl)phenyl]diphenyl-, salt with 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 847800-06-0
CMF C25 H23 O2 S2



CM 2

CRN 45187-15-3
CMF C4 F9 O3 S

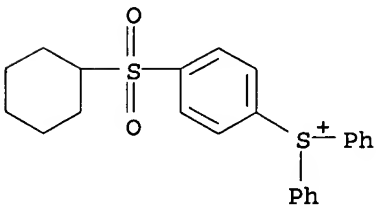
L15 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2005:219970 CAPLUS
DN 142:306448
TI Onium salt compound and radiation-sensitive resin composition
IN Yoneda, Eiji; Wang, Yong; Nishimura, Yukio
PA Japan
SO U.S. Pat. Appl. Publ., 85 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2005053861	A1	20050310	US 2003-743809	20031224
	JP 2004250427	A2	20040909	JP 2003-182089	20030626
	JP 2005104956	A2	20050421	JP 2003-423516	20031219
PRAI	JP 2002-373531	A	20021225		
	JP 2002-373625	A	20021225		
	JP 2003-182089	A	20030626		
	JP 2003-315010	A	20030908		

OS MARPAT 142:306448
AB An onium salt compound having a cation moiety of formula I (A = I, S; m = 1 or 2; n = 0 or 1; x = 1-10; and Ar1, Ar2 = aromatic hydrocarbon group; and P = -O-SO2R, -O-S(O)R, -SO2R; R = H, (substituted) alkyl group, or a (substituted) alicyclic hydrocarbon group)is disclosed. The onium salt compound is suitable as a photoacid generator for photoresists of a pos.-tone radiation-sensitive resin composition The pos.-tone radiation-sensitive resin composition containing this compound is useful as a chemical-amplified photoresist exhibiting high resolution at high sensitivity, responsive to various radiations, and having outstanding storage stability.
IT **847800-01-5P 847800-05-9P**
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(onium salt compound as photoacid generator for radiation-sensitive resin composition)
RN 847800-01-5 CAPLUS
CN Sulfonium, [4-(cyclohexylsulfonyl)phenyl]diphenyl-, salt with 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 847800-00-4
CMF C24 H25 O2 S2



CM 2

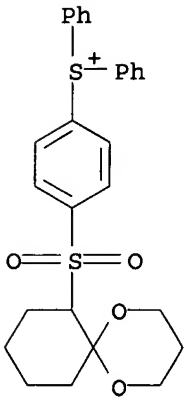
CRN 45187-15-3
CMF C4 F9 O3 S

$^{-}O_3S-(CF_2)_3-CF_3$

RN 847800-05-9 CAPLUS
CN Sulfonium, [4-(1,5-dioxaspiro[5.5]undec-7-ylsulfonyl)phenyl]diphenyl-, salt with 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 847800-04-8
CMF C27 H29 O4 S2



CM 2

CRN 45187-15-3
CMF C4 F9 O3 S

$^{-}O_3S-(CF_2)_3-CF_3$

IT **847799-76-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of onium salt compound as photoacid generator for radiation-sensitive resin composition)
RN 847799-76-2 CAPLUS
CN Sulfonium, [4-(1,4-dioxaspiro[4.5]dec-7-ylsulfonyl)phenyl]diphenyl-, salt with 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 847799-75-1
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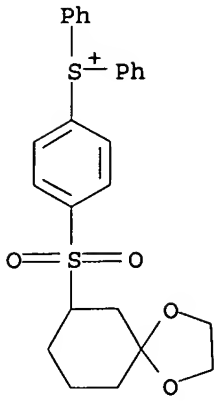
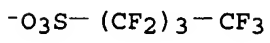


CM 2

CRN 45187-15-3
CMF C4 F9 O3 S



L15 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1997:599494 CAPLUS
DN 127:191198
TI Photoinitiators and photoinitiator compositions and photocurable hybrid resin compositions
IN Toba, Yasumasa; Tanaka, Yasuhiro; Yasuike, Madoka
PA Toyo Ink Mfg. Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 31 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

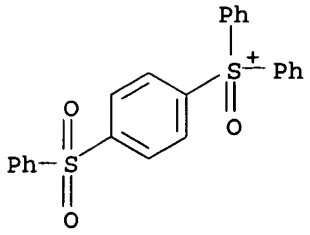
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 09183961	A2	19970715	JP 1995-342494	19951228
PRAI JP 1995-342494		19951228		

OS MARPAT 127:191198
AB The photoinitiator compns., having a high curing rate, contain sulfoxonium borates R1R2R3S+(O)·(BXmZn)- (R1-R3 = C6-20 aryl which may be substituted by halo, OH, NO2, CN, NH2, alkyl, alkoxy, aralkyloxy, aryl, aryloxy, aralkyl group; X = F, Cl; Z = Ph group substituted by ≥2 F, CN, NO2, CF3; m = 0-3; n = 1-4; m + n = 4). Thus, a composition containing 100 parts an epoxy resin (ERL 4221) and 3 parts triphenylsulfoxonium tetrakis(pentafluorophenyl)borate was irradiated by UV to give a cured film.
IT **194293-67-9 194293-75-9**
RL: CAT (Catalyst use); USES (Uses)
(sulfoxonium borate photoinitiators and photocurable hybrid resin compns.)
RN 194293-67-9 CAPLUS
CN Sulfoxonium, diphenyl[4-(phenylsulfonyl)phenyl]-, tetrakis(pentafluorophenyl)borate(1-) (9CI) (CA INDEX NAME)

CM 1

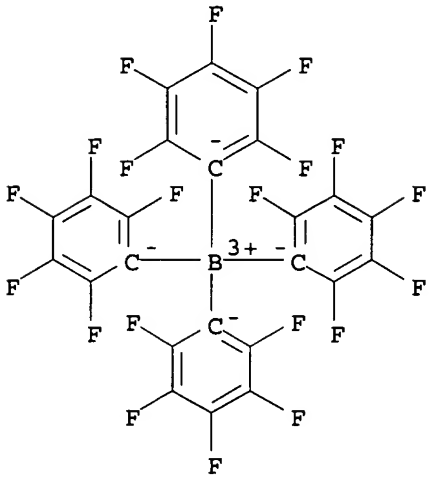
CRN 139572-76-2

CMF C24 H19 O3 S2



CM 2

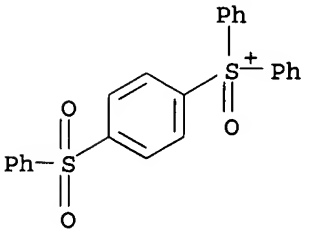
CRN 47855-94-7
CMF C24 B F20
CCI CCS



RN 194293-75-9 CAPLUS
CN Sulfoxonium, diphenyl[4-(phenylsulfonyl)phenyl]-, tetrakis[4-(trifluoromethyl)phenyl]borate(1-) (9CI) (CA INDEX NAME)

CM 1

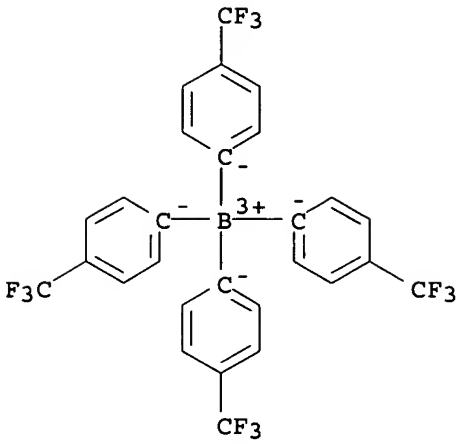
CRN 139572-76-2
CMF C24 H19 O3 S2



CM 2

CRN 47823-82-5

CMF C28 H16 B F12
CCI CCS



L15 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1996:256323 CAPLUS
DN 124:318806
TI Photopolymerization initiators, radiation-curable compositions, and their cured products
IN Abe, Tetsuya; Yokoshima, Minoru
PA Nippon Kayaku Kk, Japan
SO Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08041116	A2	19960213	JP 1994-193778	19940727
	JP 3424772	B2	20030707		
PRAI	JP 1994-193778		19940727		

OS MARPAT 124:318806
AB Sulfonium- and sulfoxonium-type photopolymn. initiators are synthesized and are used in radiation curable epoxy resins. Thus, compound I was oxidized with hydrogen peroxide to give compound II; II 1.5, Celloxide 2021 80, and EHPE 3150 20 parts were mixed and cured by UV to show transparency, storage stability, gloss, no odor, and tack free 23 mJ/cm2.
IT **176310-56-8P 176310-58-0P 176310-62-6P**
176310-64-8P 176310-66-0P
RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
(preparation of photopolymn. initiators and radiation-curable compns.)
RN 176310-56-8 CAPLUS
CN Sulfonium, bis(4-chlorophenyl)[4-[[4-(diphenylsulfonio)phenyl]sulfonyl]phenyl]-, bis[hexafluorophosphate(1-)] (9CI) (CA INDEX NAME)

CM 1

CRN 176310-55-7
CMF C36 H26 Cl2 O2 S3